

Appl. No. 10/714,497
Amdt. Dated February 6, 2006
Reply to Office Action of December 8, 2005

Attorney Docket No. 81784.0293
Customer No.: 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A semiconductor device manufacturing method, comprising:

a first step of forming a laminated structure by adhering, on a semiconductor substrate including a plurality of integrated circuits, a carrier member covering a region in which the plurality of integrated circuits are formed, with an insulating resin interposed between the semiconductor substrate and the carrier member;

a second step of cutting the semiconductor substrate together with the insulating resin using a dicing saw while allowing at least a portion of the carrier member to remain uncut;

a third step of forming metal wiring on a machined surface created in the second step; and

a fourth step of dividing the laminated structure by cutting the carrier member; wherein

the second step is performed while cooling the dicing saw and a cutting portion to be maintained at a temperature lower than the softening temperature of the insulating resin by spraying a coolant having a pH value ranging from 6 to 8 on the dicing saw.

2. (Cancelled)

3. (Currently Amended): A semiconductor device manufacturing method as defined in claim 2 1, wherein the second step includes spraying the coolant on

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the dicing saw along a rotating direction of the dicing saw at an angle of elevation of between 5° and 45°, inclusive.

4. (Currently Amended): A semiconductor device manufacturing method as defined in claim 2 1, herein the second step includes spraying the coolant with a spraying width larger than the width of the dicing saw.

5. (Currently Amended): A semiconductor device manufacturing method as defined in claim 2 1, wherein the coolant used in the second step is obtained by passing tap water through an RO film.

6. (Cancelled)

7. (Cancelled)